



General Discussion: Labor Markets and Fiscal Sustainability

Chair: Maurice Obstfeld

Şebnem Kalemli-Özcan: Excellent paper. Very courageous at these times. So, I would like to go back to the point Karen made on the foreign demand for assets. I know you did a lot of robustness at the end, like what if that happens, what if that happens? And I know it's hard to project the decline in the foreign demand for U.S. assets. But maybe you can use the Liberation Day tariffs as a case study just to see what is going on. Especially if you use data from Bank of England and ECB-SHS, you can pick up some decline in foreign demand for US assets. We actually did see some during dollar's depreciation. Out of American bonds into the European and British bonds. So, it was short-lived but still might help you to put that in your model projections, to project the decline in foreign asset demand.

Phillips Swagel: I'll echo Karen that this is really a beautiful analytic framework. I have to admit to some relief that the results match the CBO baseline. We are sometimes criticized as being too benign on the interest rate outlook, but that's because we have basically the same structure that they have of downward pressure

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from demographics, offsetting the upward pressure on yields from mounting debt.

Now, relatedly, I'm often asked by policymakers, when is the deficit reduction needed? And obviously that echoes Karen's discussion. And sometimes, or maybe a lot of times, the subtext of the question is, well, how much room do we have for further fiscal expansion? And so this paper, I think as Karen demonstrated, will make policymakers really happy. Half of them have in mind to undertake the fiscal adjustment now, half of them later. There's a sense in which that's akin to tennis with a changeover of positions at odd games.

This paper can be read as saying the situation is ok until a 250 percent debt ratio [compared to 100 percent in summer 2025]. I tell policymakers that the risk is of a sudden problem. I have in mind Flood and Garber, which I'm pretty sure, Maury, I learned in your class. This is absolutely not the intention of the authors to tell policymakers to delay the needed fiscal adjustment. But I just worry a little bit that this paper will be seen as akin to the international finance literature before Flood and Garber in not taking into account the possibility of a sudden crisis driven by a change in beliefs, which again, is absolutely not the intention. And I know from talking to Ludwig that they're working on this dimension of analysis.

I have some constructive suggestions. The first is to give more prominence to the Vissing-Jorgensen analysis on pages 45 to 46 [in the draft paper]. I would see that situation as the base case rather than a variation. The beauty of this model is that it's so natural to add that in.

And then like Karen and like Sebnem, I would also do more to examine shocks to global demand for dollar assets. And you could do shocks to all dollar assets or shocks to the demand for just

government assets. And within government assets there could be shocks to the demand for Treasury securities or to other assets, whether the debt or equity of government-linked enterprises in the United States.

And just to finish, this also allows for a benign analysis. Imagine a gradual fiscal adjustment, a kind of grand bargain. The model in this paper would allow for analysis of that to have a positive impact on the economy even before the adjustment actually takes place, because there would be lower interest rates up front that make the job easier. That would be an interesting scenario. And obviously for this audience of central bankers, that fiscal action would be very welcome because a credible adjustment will make the life of everyone here a lot easier.

Olivier Garnier: Fascinating paper, but maybe too fascinating for politicians. Two caveats should be put forward. First, the model is relevant for a large, closed economy. But for a small open economy, like my country, France, then aging will increase asset demand, but asset demand for foreign assets. Because in that case, the incentive will be to invest in economies where aging is less advanced or where productivity is higher. My second caveat is that not all increase in government debt is coming from demographics. If the increase in government debt is coming from higher defense spending or from a surge in the number of government employees, then asset demand will not be boosted. So, I think we should be cautious in interpreting the paper's results.

Amir Sufi: Great paper and great discussion. I love the contrast between the arguments. Fascinating. When we wrote our 2021 Jackson Hole paper, which Ludwig was a co-author on, we had these pictures of the age-wealth profile. I haven't been able to stop thinking about that graph since we did it. It wasn't central in

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that paper, but basically the bottom line, which shouldn't be surprising to many people in this room, is that the age-wealth profile is steeper now than it has ever been in the last 70 years that we have the Survey of Consumer Finances data in the United States. Meaning, people over the age of 65 or 70 have more wealth as a share of total wealth, higher wealth to income ratios than we've ever seen in history. The bottom line question is then: what is going to happen to all of that money? I think we all wish we could live forever, but we cannot.

It seems to me from a model perspective that what happens to that money matters a lot. Are people going to save it or spend all of it before they die? Maybe we will have super luxury retirement homes in Manhattan. Are they going to gift it to their children who are just as rich as them and are therefore going to keep asset demand high? Or are they going to give it to kids who are going to spend it in a splurge? I think your model has something to say about that. I'd love to hear what your thoughts are on that.

Ludwig Straub: Let me, first of all, thank Karen.

I would like to clarify a few things right off the bat. When we say in the long run, 2100, debt could be higher and still sustainable, we really mean in the long run, not today. We can't afford to have 200 or 250% debt to GDP today. So, it's really requiring us to think ahead of what a very low fertility U.S. or world economy might look like in 2100.

We're not saying anywhere in the paper that the path of deficits that we're currently on, outside of wartime or recession, is sustainable. And in fact, the way I would interpret our findings is that I would say we need a massive fiscal adjustment no matter what. We're going to have to think about how we're going to finance our social insurance programs, including health care and social security. That might require an increase in tax revenue that

goes way beyond any increases we have seen in the U.S. economy historically. The tax revenue share of GDP has been roughly stable just below 20% in the U.S. economy. We may have to add an additional 10 plus percent to that. So a large fiscal consolidation is needed, no matter what.

What we're saying in the paper is that it's possible that because of these increases in asset demand, a 1 to 2% primary deficit every year until 2100 is still sustainable. It's possible we do not have to raise primary surpluses. Our paper is not saying 3 1/2% is sustainable. It's not saying we can just let it rip and avoid consolidation. This is the side of our paper that I would emphasize.

I loved Karen's points on the debt sensitivity of the interest rate. This is a Jackson Hole paper, so we had to submit our slides two weeks ago. Since then we have done more work on this topic. Not everything is in the paper yet, but will be going forward. If we take the Krishnamurthy and Vissing-Jorgensen debt sensitivities on board and the fact that older Americans tend to shift their portfolios toward safe assets, which on average pushes down safe rates relative to the expected return on risky assets, the number for sustainable debt would come out to be somewhere just below 200% of GDP, say 170 or 180%. Still larger than what my prior was and maybe what your prior was.

There were a number of other very interesting questions and comments. I loved Şebnem's suggestion of thinking about a foreign demand shock. We've been blessed with a global saving glut from the rest of the world. It's possible that we will have the reverse going forward. I think that's a line we could add to the different scenarios that we analyze.

I'm also very sympathetic to the idea that there may be risks on the horizon that scale with the stock of debt, for example, that a

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fiscal crisis might be worse if the stock is higher. Even so, I would say that on average our results still push you towards thinking, a higher debt level may be warranted, all else equal, although maybe you don't want to go as extreme in that case. But that's something that in practice we should think about.

I'm very sympathetic to Olivier's perspective on small open economy aspects. We didn't have any space left in the paper to go into that topic, but I think it's super interesting going forward. This involves having a discussion of how much retirement saving actually stays in a country. I remember seeing some charts from Italy where a lot of retirement saving is actually in Italian government debt. That may differ across countries. Famously Japanese pension funds invest a lot in the rest of the world. There's an interesting cross-border analysis follow-up to our work here.

I'm also very sympathetic to Amir's point on bequests. I think this is a, I would have said, million-dollar question, but maybe more like a trillion-dollar question. Where does all the money go that is now being held by very rich older Americans? Is that going to be spent by their children or not? My suspicion is that with increasing longevity, the age at which bequests are received increases. A bequest received at age 65 may be less likely to be spent quickly than if it was received in a younger age. That could mean that these trillions of dollars sit around for longer, which could add to asset demand going forward.

Karen Dynan: I'll just quickly second the interest in Amir's suggestion for more research on what older people actually do with their assets. I think it's a really interesting question. Because the pattern of asset holding in the data doesn't look anything like how we teach the lifecycle model, where people kind of run up their assets while working and run them down as they approach

to the end of life. People who do a lot of saving, at least so far, hold onto this saving, with many of them passing it on to their kids. This framework could help us really make some progress on this question. Of course, if people aren't having kids (going back to the yesterday's session), that could change the equation.

Jan Eberly: This is a really rich and interesting paper, and there is scope to ask many different questions and do other experiments. I want to push you in a different direction than has been brought up so far. One of the first charts that you put up and that Karen also put up, looks at asset demand versus asset supply and changes over time. One of the big points from that chart is that the change in asset supply is small.

I want to go back to a point yesterday about looking at net versus gross because what you have in the chart is net asset supply. However, when you look at your colorful decomposition of asset demand and asset supply, there are very big gross movements in asset supply. In particular, the biggest category on either chart -- bigger than demographics, bigger than inequality -- is that change in asset supply coming from what you characterize as pure profits. That's the piece I'd like to dig into more because in the literature, that's the equivalent of Tobin's Q greater than 1. In your accounting for Q greater than 1, all of the value is generated by pure profits. In the literature, there's a pretty active debate about what's driving Q greater than 1. Pure profits is one possibility. Another is investments in R&D, investments in data, or the firm component of human capital. All of those would be included in that category. I care less about the accounting than I do about the impact that those alternatives would have on your projections. Because if it's pure profits, when they go up, that drives down the capital stock. That's one potential interaction. Whereas if the value is created by R&D, that could go in exactly the opposite

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direction and drive up the capital stock. That was really one of the main discussion points yesterday in our consideration of technological progress. A question for you is, as you make these projections, you're holding these effects constant, but there are more potential interactions if you broke down the pure profit category to include other sources of value, such as R&D, human capital and other impacts, how would it change your projections?

Laura Veldkamp: Thank you. There's a very obvious solution to this problem. There is a nearly unlimited supply of potential young Americans, immigrants, right? And this paper could be used to quantify the real financial benefits for current Americans in terms of lower taxes, less debt, and more robust retirement security by allowing an additional amount of immigrants. And I think using this framework to put a price on immigration could really inform the public debate.

Peter Henry: Ludwig, thank you for a very interesting paper. It's a great framework. I want to make a connection between your paper and Emi and Jon's. You are really talking about the required rate of return on assets, and there's an important connection between that return, Karen's point about the debt sensitivity of interest rates, and the more general connection between the sensitivity of required rates of return and inflation fighting credibility that was the subject of the previous paper and discussion. One thing about that previous discussion makes me uncomfortable. The discussion proceeded as if we've hit the inflation target, and we haven't hit the target yet. If you were to ask the question in 2022, when disinflation started, do you think that the ECB will get to its target before the Fed gets to theirs, I'm not sure that people's priors would have been on the ECB, but the ECB is back to target and the Fed is not.

So, in addition to the exercise you've done, when thinking about the partial derivatives, it would be worthwhile thinking about the partials of required rates of return with respect to some measure of inflation fighting credibility. Amir's discussion made a couple of similar points, as did Philip Lane's. But in these recent and historical disinflation episodes, I would like to say just how important it is that we, in fact, get back to target.

Doug Elmendorf: Thank you. I want to just emphasize the importance of uncertainty. I think when policymakers ask analysts how far debt can run up before action is needed, the best answer is no one knows. I don't want to sound nihilistic, and I'm a fan of this paper, and I'm a fan of this line of research, but I also want us to be realistic. The level and trajectory of federal debt is outside of the historical sample, certainly for this country and really for most countries most of the time. Economists aren't that good at predicting things even within historical samples, and we should be skeptical of our ability to predict very carefully outside of the historical sample.

Moreover, as has been noted, fiscal crises tend to emerge not just because debt reaches some level, but because debt is high and also current deficits are large or current account imbalances are large or governments are caught fudging data and lose credibility or policymakers just don't seem very competent in what they're doing. So even if we understood the true model of the economy, there'd be a lot of variables in it.

So, I think we risk if we focus on some particular number of either inadvertently suggesting this can run up a long, long time without hitting trouble or inadvertently suggesting that we're on the cusp of doom, which happened to some extent in the public discourse here a dozen years ago in this country and turned out not to be true and undermined the credibility of some of, I think,

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the legitimate worries. So, even though I have found that policymakers didn't like to hear "we don't know" as an answer, it's important to give it if that is right. And moreover, because there aren't particularly good reasons for waiting, the idea that we should try to test where the edge of the cliff is is really not very compelling at all. Thank you.

Debra Lucas: I kind of want to second what Doug just said, and then maybe frame it in a slightly different way, which is I don't think you can really address sustainability in a deterministic model. So, it would be really nice if you could extend this analysis to make demand and supply stochastic, because we know that it's shocks, not stocks, that cause crises. And that's what the concern is. And I'm not going to be quite as nihilistic, because I think we do know that the probability of a crisis goes up in debt levels. So just heuristically for policymakers, we'd like our models to say, well, we don't know where the cliff is, but we do know that something bad is likely to happen as leverage goes up. So I hope you take it in that direction.

Just very briefly, this hasn't come up, but when I was reading the paper, I was obsessed with the old Barro question about whether government debt was net worth, and how to think about it in terms of your wealth shifter things, which are pretty important, I think, for your asset demand. If people do perceive a higher probability of their tax liabilities going up, I'm not actually sure whether I think that's going to increase or decrease their demand for government debt, because they could be saving in anticipation of having to make those payments, but they could also be spending more to not be taxed. So, it's kind of tricky.

And then just one last thing. Japan was floating around for a while. Japan was floating around in the background as kind of proof that you could have a low interest rate regime and very high

debt levels, but the paper doesn't talk about financial suppression, which I think everyone talks about in the case of Japan. So, I wouldn't necessarily take that as a proof of possibility. Thank you.

Ludwig Straub: I'm going to be very brief.

Jan's comments are great. I was thinking about your line of work in this area, actually. We haven't really unpacked the pure profits term and thought about what that implies for the dynamics. When I looked at that chart, I had a reaction like you did. This term is large. It is a possibility that if this term continues rising, because for whatever reason profitability of U.S. firms keeps going up, then that could cause a reverse crowd out, and push rates up? Because investing in U.S. firms would become more attractive and pull funds away from government debt. This can happen irrespective of whether our pure profits are driven by intangibles or markups, or something else. The paper has a little bit more on this question, but we should dig deeper for sure.

I love Laura's comments on immigrants. As Claudia mentioned in her presentation yesterday, we seem to have falling fertility now around the world. My interpretation is that there might more and more of a tug of war for the "best" immigrants. In the U.S., we have a great "magnet" that is able to attract high skilled immigrants, which can contribute in the workforce and pay taxes that fund our pensions. That magnet is called universities. It feels like we should leverage that magnet. So, I totally agree with Laura's comments.

I love Peter's question on credibility. If we're not sending the message that we know how to keep debt sustainable in the face of the rising cost of social insurance programs, the bond market will see rising yields. So, there is a role there for the credibility of the fiscal authority.

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I'm totally in line with Doug's and Debbie's sentiment with regard to uncertainty. I think that's always something that should be on top of our minds, there should be a certain sense of humility when we look at these numbers, whether it's these or CBO's numbers or any other forecast. We should always ask ourselves, what if this or that shock occurs? Are we in a good position to respond to it? I think that is true today, and I think that's going to be true in 2100. I see this work as saying, directionally, low fertility increases the possibility of greater debt levels becoming more sustainable going forward. Obviously, the exact numbers shouldn't be taken too seriously.